

Replacement and Upgrades to MURR's Facility Electrical Transformer and Reactor Primary Coolant Pumps and Motors

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University of Missouri

Program: Infrastructure –

Reactor Upgrades

ABSTRACT:

The University of Missouri requests \$170,775 from the U.S. Department of Energy (DOE) Nuclear Energy University Program (NEUP) Reactor Upgrades Infrastructure Support Program to replace and upgrade two essential systems for the continued safe and reliable operation of the University's 10 MW Research Reactor in order to facilitate research, education, and service activities in fields related to DOE Office of Nuclear Energy's program-related areas: Fuel Cycle Research and Development, Reactor Concepts RD&D, and Nuclear Energy Advanced Modeling and Simulation. The objective of this project is to acquire three new primary coolant system pumps and motors, and a new electrical transformer that will replace the originally installed transformer that has accommodated MURR's 120/280V electrical needs since the facility began operations in 1966. The benefit of these upgrades is to ensure safe operations to maintain and expand the advancement of knowledge made possible through the infrastructural and technical capabilities available through MURR – a facility that supports significant research and workforce development activities in academic disciplines of interest to the Office of Nuclear Energy, including Materials Sciences and Engineering, Chemistry/Radiochemistry, and Applied Physics/Neutron Scattering.